AMENDMENTS TO THE CLAIMS:

Please amend Claims 1, 18, 42, and 53 as follows:

1. (currently amended) An optical switch comprising:

a first input operable to provide a first input optical signal;

a second input operable to provide a second input optical signal;

a first output operable to transmit either of said first and second signals;

a second output operable to transmit said first signal;

a retro-reflector;

a first deflector operable to rotate about an axis in opposite directions from a neutral position to a first and second state, said first deflector operable in ~~a~~ said first state to direct said first input optical signal from said first input to a first point on said retro-reflector, said first deflector operable in ~~a~~ said second state to direct said first input optical signal to a second point on said retro-reflector;

a second deflector operable to direct said first input optical signal from said second point of said retro-reflector to said second output;

a third deflector operable to direct said second input optical signal from said second input to a third point on said retro-reflector; and

a fourth deflector operable to rotate about an axis in opposite directions from a neutral position to a first and second state, said fourth deflector operable in ~~a~~ said first state to direct said first optical input signal from said first point on said retro-reflector to said first output, said fourth deflector operable in ~~a~~ said second state to direct said second input optical signal from said third point on said retro-reflector to said first output.

2. (original) The optical switch of Claim 1, wherein said retro-reflector is comprised of at least two separate retro-reflectors.

3. (original) The optical switch of Claim 1, wherein said retro-reflector is comprised of at least three separate retro-reflectors.

4. (original) The optical switch of Claim 1, wherein said retro-reflector is a curved reflecting surface.

5. (original) The optical switch of Claim 1, wherein said retro-reflector is operable to focus said first signal from said first deflector to said second deflector.

6. (original) The optical switch of Claim 1, wherein said retro-reflector is operable to focus said first signal from said first deflector to said fourth deflector.

7. (original) The optical switch of Claim 1, wherein said retro-reflector is operable to focus said second signal from said third deflector to said fourth deflector.

8. (original) The optical switch of Claim 1, at least one of said first, second, third, and fourth deflectors comprised of a single reflective surface.

9. (original) The optical switch of Claim 1, at least one of said first, second, third, and fourth deflectors comprised of an array of reflective surfaces.

10. (original) The optical switch of Claim 1, said first, second, third, and fourth deflectors comprised of a single array of reflective surfaces.

11. (original) The optical switch of Claim 1, at least one of said second and third deflectors comprised of a fixed reflective surface.

12. (original) The optical switch of Claim 1, at least one of said first, second, third, and fourth deflectors comprised of a flat reflective surface.

13. (original) The optical switch of Claim 1, at least one of said first, second, third, and fourth deflectors comprised of a curved reflective surface.

14. (original) The optical switch of Claim 1, at least one of said first, second, third, and fourth deflectors comprised of a spherical curved reflective surface.

15. (original) The optical switch of Claim 1, at least one of said first, second, third, and fourth deflectors comprised of an aspheric curved reflective surface.

16. (original) The optical switch of Claim 1, at least one of said first and second inputs comprised of an optical fiber.

17. (original) The optical switch of Claim 1, at least one of said first and second outputs comprised of an optical fiber.

18. (currently amended) An optical switch comprising:

a first input operable to provide a first input optical signal;

a second input operable to provide a second input optical signal;

a first output operable to transmit either of said first and second signals;

a second output operable to transmit said first signal;

a retro-reflector;

a signal separator operable to receive said first input optical signal and to separate said first input optical signal into at least two first input signal components;

a first deflector operable to rotate about an axis in opposite directions from a neutral position to a first and second state, said first deflector operable in a said first state to direct at least one said first input signal component from said first input to a first region of said retro-reflector, said first deflector operable in a said second state to direct at least one said first input signal component from said first input to a second region of said retro-reflector;

a second deflector operable to direct said at least one said first input signal component from said second region of said retro-reflector to said second output;

a third deflector operable to direct at least one component of said second input optical signal from said second input to a third region of said retro-reflector; and

a fourth deflector operable to rotate about an axis in opposite directions from a neutral position to a first and second state, said fourth deflector operable in a said first state to direct said at least one said first input signal component from said first region of said retro-reflector to said first output, said fourth deflector operable in a said second state to direct said second input optical signal from said third region of said retro-reflector to said first output.

19. (original) The optical switch of Claim 18, wherein said retro-reflector is comprised of at least two separate retro-reflectors.

20. (original) The optical switch of Claim 18, wherein said retro-reflector is comprised of at least three separate retro-reflectors.

21. (original) The optical switch of Claim 18, wherein said retro-reflector is a curved reflecting surface.

22. (original) The optical switch of Claim 18, wherein said retro-reflector is operable to focus said first signal from said first deflector to said second deflector.

23. (original) The optical switch of Claim 18, wherein said retro-reflector is operable to focus said first signal from said first deflector to said fourth deflector.
24. (original) The optical switch of Claim 18, wherein said retro-reflector is operable to focus said second signal from said third deflector to said fourth deflector.
25. (original) The optical switch of Claim 18, at least one of said first, second, third, and fourth deflectors comprised of a single reflective surface.
26. (original) The optical switch of Claim 18, at least one of said first, second, third, and fourth deflectors comprised of an array of reflective surfaces.
27. (original) The optical switch of Claim 18, said first, second, third, and fourth deflectors comprised of a single array of reflective surfaces.
28. (original) The optical switch of Claim 18, at least one of said second and third deflectors comprised of a fixed reflective surface.
29. (original) The optical switch of Claim 18, at least one of said first, second, third, and fourth deflectors comprised of a flat reflective surface.
30. (original) The optical switch of Claim 18, at least one of said first, second, third, and fourth deflectors comprised of a curved reflective surface.
31. (original) The optical switch of Claim 18, at least one of said first, second, third, and fourth deflectors comprised of a spherical curved reflective surface.
32. (original) The optical switch of Claim 18, at least one of said first, second, third, and fourth deflectors comprised of an aspheric curved reflective surface.
33. (original) The optical switch of Claim 18, at least one of said first, second, third, and fourth deflectors comprised of a linear array of reflective surfaces, said linear array comprised of portions of said array, each said portion selectively operable to deflect one of said input signal components.
34. (original) The optical switch of Claim 18, at least one of said first, second, third, and fourth deflectors comprised of an area array of reflective surfaces.
35. (original) The optical switch of Claim 18, at least one of said first and second inputs comprised of an optical fiber.
36. (original) The optical switch of Claim 18, at least one of said first and second outputs

comprised of an optical fiber.

37. (original) The optical switch of Claim 18, further comprising at least one optical fiber to direct at least one signal component from said signal separator to said first deflector.

38. (original) The optical switch of Claim 18, said signal separator further comprising a grating.

39. (original) The optical switch of Claim 18, said signal separator further comprising a prism.

40. (original) The optical switch of Claim 18, said signal separator further comprising a hologram.

41. (original) The optical switch of Claim 18, said signal separator further comprising an arrayed waveguide grating.

42. (currently amended) An optical switch comprising:

a first input operable to provide a first input optical signal;

a second input operable to provide a second input optical signal;

a first output operable to transmit either of said first and second signals;

a second output operable to transmit said first signal;

a first deflector;

a second deflector;

a third deflector;

a fourth deflector;

said first deflector operable to rotate about an axis in opposite directions from a neutral position to a first and second state, said first deflector operable in ~~a~~ said first state to direct said first input optical signal from said first input to said fourth deflector, said first deflector operable in ~~a~~ said second state to direct said first input optical signal to said second deflector;

said second deflector operable to direct said first input optical signal from said first deflector to said second output;

said third deflector operable to direct said second input optical signal from said second input to said fourth deflector; and

said fourth deflector operable to rotate about an axis in opposite directions from a neutral position to a first and second state, said fourth deflector operable in a said first state to direct said first optical input signal from said first deflector to said first output, said fourth deflector operable in a said second state to direct said second input optical signal from said third deflector to said first output.

43. (original) The optical switch of Claim 42, at least one of said first, second, third, and fourth deflectors comprised of a single reflective surface.

44. (original) The optical switch of Claim 42, at least one of said first, second, third, and fourth deflectors comprised of an array of reflective surfaces.

45. (original) The optical switch of Claim 42, said first, second, third, and fourth deflectors comprised of a single array of reflective surfaces.

46. (original) The optical switch of Claim 42, at least one of said second and third deflectors comprised of a fixed reflective surface.

47. (original) The optical switch of Claim 42, at least one of said first, second, third, and fourth deflectors comprised of a flat reflective surface.

48. (original) The optical switch of Claim 42, at least one of said first, second, third, and fourth deflectors comprised of a curved reflective surface.

49. (original) The optical switch of Claim 42, at least one of said first, second, third, and fourth deflectors comprised of a spherical curved reflective surface.

50. (original) The optical switch of Claim 42, at least one of said first, second, third, and fourth deflectors comprised of an aspherical reflective surface.

51. (original) The optical switch of Claim 42, at least one of said first and second inputs comprised of an optical fiber.

52. (original) The optical switch of Claim 42, at least one of said first and second outputs comprised of an optical fiber.

53. (currently amended) An optical switch comprising:

a first input operable to provide a first input optical signal;

a second input operable to provide a second input optical signal;

a first output operable to transmit either of said first and second signals;

a second output operable to transmit said first signal;

a signal separator operable to receive said first input optical signal and to separate said first input optical signal into at least two first input signal components;

a first deflector;

a second deflector;

a third deflector;

a fourth deflector;

said first deflector operable to rotate about an axis in opposite directions from a neutral position to a first and second state, said first deflector operable in ~~a~~ said first state to direct at least one said first input signal component from said first input to said second deflector, said first deflector operable in ~~a~~ said second state to direct at least one said first input signal component from said first input to said fourth deflector;

said second deflector operable to direct said at least one said first input signal component from first deflector to said second output;

said third deflector operable to direct at least one component of said second input optical signal from said second input to said fourth deflector; and

said fourth deflector operable to rotate about an axis in opposite directions from a neutral position to a first and second state, said fourth deflector operable in ~~a~~ said first state to direct said at least one said first input signal component from said first deflector to said first output, said fourth deflector operable in ~~a~~ said second state to direct said second input optical signal from said third deflector to said first output.

54. (original) The optical switch of Claim 53, at least one of said first, second, third, and fourth deflectors comprised of a single reflective surface.

55. (original) The optical switch of Claim 53, at least one of said first, second, third, and fourth deflectors comprised of an array of reflective surfaces.

56. (original) The optical switch of Claim 53, said first, second, third, and fourth deflectors comprised of a single array of reflective surfaces.

57. (original) The optical switch of Claim 53, at least one of said second and third deflectors

comprised of a fixed reflective surface.

58. (original) The optical switch of Claim 53, at least one of said first, second, third, and fourth deflectors comprised of a flat reflective surface.

59. (original) The optical switch of Claim 53, at least one of said first, second, third, and fourth deflectors comprised of a curved reflective surface.

60. (original) The optical switch of Claim 53, at least one of said first, second, third, and fourth deflectors comprised of a spherical curved reflective surface.

61. (original) The optical switch of Claim 53, at least one of said first, second, third, and fourth deflectors comprised of an aspherical reflective surface.

62. (original) The optical switch of Claim 53, at least one of said first, second, third, and fourth deflectors comprised of a linear array of reflective surfaces, said linear array comprised of portions of said array, each said portion selectively operable to deflect one of said input signal components.

63. (original) The optical switch of Claim 53, at least one of said first, second, third, and fourth deflectors comprised of an area array of reflective surfaces.

64. (original) The optical switch of Claim 53, at least one of said first and second inputs comprised of an optical fiber.

65. (original) The optical switch of Claim 53, at least one of said first and second outputs comprised of an optical fiber.

66. (original) The optical switch of Claim 53, further comprising at least one optical fiber to direct at least one signal component from said signal separator to said first deflector.

67. (original) The optical switch of Claim 53, said signal separator further comprising a grating.

68. (original) The optical switch of Claim 53, said signal separator further comprising a prism.

69. (original) The optical switch of Claim 53, said signal separator further comprising a hologram.

70. (original) The optical switch of Claim 53, said signal separator further comprising an arrayed waveguide grating.

Please add the following claims:

71. (new) An optical switch comprising:

a first input operable to provide a first input optical signal;

a second input operable to provide a second input optical signal;

a first output operable to transmit either of said first and second signals;

a second output operable to transmit said first signal;

a retro-reflector;

a first deflector operable to rotate about an axis in opposite directions from a neutral position to a first and second state, said first deflector operable in said first state to direct said first input optical signal from said first input to a first point on said retro-reflector, said first deflector operable in said second state to direct said first input optical signal to a second point on said retro-reflector;

a second deflector operable to direct said first input optical signal from said second point of said retro-reflector to said second output;

a third deflector operable to direct said second input optical signal from said second input to a third point on said retro-reflector, at least one of said second and third deflectors comprised of a fixed reflective surface; and

a fourth deflector operable to rotate about an axis in opposite directions from a neutral position to a first and second state, said fourth deflector operable in said first state to direct said first optical input signal from said first point on said retro-reflector to said first output, said fourth deflector operable in said second state to direct said second input optical signal from said third point on said retro-reflector to said first output.

72. (new) The optical switch of Claim 71, wherein said retro-reflector is comprised of at least two separate retro-reflectors.

73. (new) The optical switch of Claim 71, wherein said retro-reflector is operable to focus at least one of said first and second signals.

74. (new) The optical switch of Claim 71, at least one of said first, second, third, and fourth deflectors comprised of a single reflective surface.

75. (new) The optical switch of Claim 71, at least one of said first, second, third, and fourth deflectors comprised of an array of reflective surfaces.

76. (new) The optical switch of Claim 71, said first, second, third, and fourth deflectors comprised of a single array of reflective surfaces.

77. (new) An optical switch comprising:

a first input operable to provide a first input optical signal;

a second input operable to provide a second input optical signal;

a first output operable to transmit either of said first and second signals;

a second output operable to transmit said first signal;

a retro-reflector;

a signal separator operable to receive said first input optical signal and to separate said first input optical signal into at least two first input signal components;

a first deflector operable to rotate about an axis in opposite directions from a neutral position to a first and second state, said first deflector operable in said first state to direct at least one said first input signal component from said first input to a first region of said retro-reflector, said first deflector operable in said second state to direct at least one said first input signal component from said first input to a second region of said retro-reflector;

a second deflector operable to direct said at least one said first input signal component from said second region of said retro-reflector to said second output;

a third deflector operable to direct at least one component of said second input optical signal from said second input to a third region of said retro-reflector, at least one of said second and third deflectors comprised of a fixed reflective surface; and

a fourth deflector operable to rotate about an axis in opposite directions from a neutral position to a first and second state, said fourth deflector operable in said first state to direct said at least one said first input signal component from said first region of said retro-reflector to said first output, said fourth deflector operable in said second state to direct said second input optical signal from said third region of said retro-reflector to said first output.

78. (new) The optical switch of Claim 77, wherein said retro-reflector is comprised of at least two separate retro-reflectors.

79. (new) The optical switch of Claim 77, wherein said retro-reflector is operable to focus and least one of said first and second signals.

80. (new) The optical switch of Claim 77, at least one of said first, second, third, and fourth deflectors comprised of a single reflective surface.

81. (new) The optical switch of Claim 77, at least one of said first, second, third, and fourth deflectors comprised of an array of reflective surfaces.

82. (new) The optical switch of Claim 77, said first, second, third, and fourth deflectors comprised of a single array of reflective surfaces.

83. (new) An optical switch comprising:

a first input operable to provide a first input optical signal;

a second input operable to provide a second input optical signal;

a first output operable to transmit either of said first and second signals;

a second output operable to transmit said first signal;

a first deflector;

a second deflector;

a third deflector;

a fourth deflector;

said first deflector operable to rotate about an axis in opposite directions from a neutral position to a first and second state, said first deflector operable in said first state to direct said first input optical signal from said first input to said fourth deflector, said first deflector operable in said second state to direct said first input optical signal to said second deflector;

said second deflector operable to direct said first input optical signal from said first deflector to said second output;

said third deflector operable to direct said second input optical signal from said second input to said fourth deflector, at least one of said second and third deflectors comprised of a fixed reflective surface; and

said fourth deflector operable to rotate about an axis in opposite directions from a neutral position to a first and second state, said fourth deflector operable in said first state to direct said first optical input signal from said first deflector to said first output, said fourth deflector operable in said second state to direct said second input optical signal from said third deflector to said first output.

84. (new) The optical switch of Claim 83, at least one of said first, second, third, and fourth deflectors comprised of a single reflective surface.

85. (new) The optical switch of Claim 83, at least one of said first, second, third, and fourth deflectors comprised of an array of reflective surfaces.

86. (new) The optical switch of Claim 83, said first, second, third, and fourth deflectors comprised of a single array of reflective surfaces.

87. (new) An optical switch comprising:

a first input operable to provide a first input optical signal;

a second input operable to provide a second input optical signal;

a first output operable to transmit either of said first and second signals;

a second output operable to transmit said first signal;

a signal separator operable to receive said first input optical signal and to separate said first input optical signal into at least two first input signal components;

a first deflector;

a second deflector;

a third deflector;

a fourth deflector;

said first deflector operable to rotate about an axis in opposite directions from a neutral position to a first and second state, said first deflector operable in said first state to direct at least one said first input signal component from said first input to said second deflector, said first deflector operable in said second state to direct at least one said first input signal component from said first input to said fourth deflector;

said second deflector operable to direct said at least one said first input signal

component from first deflector to said second output;

said third deflector operable to direct at least one component of said second input optical signal from said second input to said fourth deflector, at least one of said second and third deflectors comprised of a fixed reflective surface; and

said fourth deflector operable to rotate about an axis in opposite directions from a neutral position to a first and second state, said fourth deflector operable in said first state to direct said at least one said first input signal component from said first deflector to said first output, said fourth deflector operable in said second state to direct said second input optical signal from said third deflector to said first output.

88. (new) The optical switch of Claim 87, at least one of said first, second, third, and fourth deflectors comprised of a single reflective surface.

89. (new) The optical switch of Claim 87, at least one of said first, second, third, and fourth deflectors comprised of an array of reflective surfaces.

90. (new) The optical switch of Claim 87, said first, second, third, and fourth deflectors comprised of a single array of reflective surfaces.